

## SHARED TOWER SYSTEM FOR ACCOMODATING MULTIPLE SERVICE PROVIDERS

### ABSTRACT

A system for sharing a cellular tower among multiple service providers comprises an antenna having an array of elements operable to define multiple, individual beams for signals in a communication frequency band and converter circuitry to convert the communication frequency band to a digital band. Filtering and signal processing circuitry define digital band portions for each of the at least two service providers, and drive the antenna to define at least one individual beam for each individual service provider.